general inventive concept under PCT Rule 13.1 because under PCT Rule 13.2 they allegedly lack the same or corresponding special technical features. The Office action notes that Claims 4-12 and 16-23 are generic.

II. Election

Applicant hereby elects with traverse, for prosecution herein, the species of Group III. Applicant submits that claims 3-8, 12, 18 and 22 are readable on the elected Group.

Contrary to what is alleged in the Office action, Applicant respectfully submits that the above-captioned application does not lack unity of invention under 37 C.F.R. §1.475. Specifically, according to 37 C.F.R. §1.475(a), when a group of inventions is claimed, unity of invention is fulfilled when there is a technical relationship among the inventions that involves one or more of the same or corresponding special technical features. In this context, the term "special technical features" means those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art.

Applicant acknowledges that it is known that the enzymes 1-deoxy-3-xylulose-5-phosphate synthase and 1-deoxy-3-xylulose-5-phosphate reductoisomerase are involved in the 1-deoxy-D-xylulose-pathway. However, contrary to what is stated in the Office action, the involvement of such enzymes in the 1-deoxy-D-xylulose pathway is not the common technical feature of the invention.

Instead, the common technical feature linking the subject matter of claims 1-23 is the provision of a method for screening compounds for the treatment of humans, animals and plants and the components needed therefor. The screening method is set forth in claims 16 and 17.

Claims 16 and 17 both specify that cells including recombinant expression vectors with DNA coded by sequence ID NO. 1, NO. 3 and NO. 5 are necessary for performing the screening

method. The preparation of such transgenic systems is set forth in claims 4-8 and 22 which are, directly or indirectly, dependent on claims 1-3. The performance of the method of claims 16 and 17 is not possible without the transgenic systems of claims 4-8 and 22. Therefore, there is a technical relationship among claims 4-8 and 22, claims 1-3 and claims 16-17 that involves corresponding special technical features.

Claims 16 and 17 both specify that the biological activity of the tested compounds shall be determined. Claims 13-15 specify how this determination is performed. Also, methods for measuring the activity of the control compounds are provided which are essential for performing the claimed screening method. Therefore, claims 13-15 have a technical relationship with claims 16-17 that involves corresponding special technical features.

The proteins claimed in claims 9-12 and 23 contain recombinant expression vectors. The task of these vectors is to ensure that enzymes having particular DNA sequences are formed in the organisms. For a person skilled in the art it is apparent that the compounds to be tested shall inhibit these enzymes and shall not attack the recombinant expression vectors. This is also apparent from claims 13-15.

Therefore, the transgenic systems of claims 4-8 and 22 are essential for performing the screening method. The proteins described in claims 9-12 and 23, which are the real target of the screening methods, are formed in the organism. Therefore, claims 9-12 and 23 have a technical relationship with claims 4-8 and 22 that involves corresponding special technical features.

Of course, there is a technical relationship among claims 18-21 which are directed to the use of the DNA sequences of claims 1-3, the proteins of claims 9-10, the transgenic systems of claim 7, and claims 16 and 17 that involves corresponding special technical features.

In performing the screening methods specified in claims 16 and 17, the inhibition of the 1-deoxy-D-xylulose pathway is measured. This pathway is only present in one defined group of organisms. Most eubacteria, algae, higher plants and parasitic protozoa of the strain Apicomplexa belong to these organisms. During phylogenesis the 1-deoxy-D-xylulose pathway first came into being in eubacteria. Plastids of algae and higher plants developed from these eubacteria wherein the 1-deoxy-D-xylulose pathway has been functionally preserved. This development is substantiated by the fact that the 1-deoxy-D-xylulose pathway is localized in the plastids of higher plants. The parasites (Apicomplexa) also include an organelle (Apicomplast) similar to the plastids which is developed by endosymbiosis with a lower algae and which includes the enzymes of the 1-deoxy-D-xylulose pathway. Humans and animals do not have the 1-deoxy-D-xylulose pathway. They produce isoprenoid via the so-called mevalonate pathway. Higher plants have in part both of the pathways. Therefore, the inhibition of the 1-deoxy-D-xylulose pathway does not kill humans, animals or plants, but does kill pathogens.

The compounds identified by the methods set forth in claims 16 and 17 are active only against the above described defined group of organisms. The compounds can be used for treating humans, animals and plants, because they are not affected by these compounds for the reasons noted above. For the screening method only the nature of the infecting organism but not of the cell in which the screening is performed or which is treated, respectively, is essential.

Therefore, there is a technical relationship among claims 1-23 that involves a common special technical feature, namely the providing of a screening method including the necessary transgenic systems, proteins, testing methods and the necessary DNA sequences. Therefore, the application does not lack unity of invention. This statement is supported by the fact that in claims 16 and 17 it is required that at least one transgenic system coded by the listed sequence

IDs is used in performing the screening methods. However, it is possible to combine two or even all three recombinant systems in one screening process. This is confirmed by claim 15.

Consequently, all of the inventions set forth in claims 1-23 (Groups I-XIV) have the same special technical feature and therefore should be regarded as being so linked as to form a single general inventive concept under PCT Rule 13.1.

In view of the foregoing remarks, it is respectfully submitted that the application contains groups of inventions which are so linked as to form a single general inventive concept under PCT Rule 13.1. Accordingly, it is requested that the unity of invention objection be withdrawn. If, however, the Examiner maintains as final the unity of invention objection, Applicant will take the position that the Examiner has admitted one species to be patentable over the other, and that any prior art must be closer to the elected species than the non-elected species to render the elected species unpatentable.

III. Conclusion

It is believed that all matters set forth in the Office action have been addressed. Favorable consideration and an early indication of the allowability of the elected claims are respectfully requested. Should the Examiner deem that an interview with Applicant's undersigned attorney would expedite consideration of the elected claims, the Examiner is invited to call the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

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